PROJECT : Upgrading of NART Building (CY 2020)

LOCATION: PNRI Compound, Commonwealth Avenue, Diliman, Quezon City

OWNER : Philippine Nuclear Research Institute (PNRI)

SUBJECT : DETAILED COST ESTIMATE

				MATERIA	AL COST	LABOR	R COST	ESTIMATED	MARK-	UPS IN PE	RCENT	TOTAL	MARK-UP		TOTAL	TOTAL	UNIT
Item No.	ITEM/DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	DIRECT COST	CONT.	ОСМ	PROFIT	%	VALUE	VAT	INDI. COST	COST	соѕт
A.	ARCHITECTURAL AND CIVIL WORKS																
1	Mobilization/Demobilization	1	lot														
2	Bonds/Insurance	1	lot														
3	Temporary Facilities	1	lot														
4	As-built plan	1	lot														
5	Project billboard	1	lot														
	Sub-total																
B.	ARCHITECTURAL AND CIVIL WORKS																
B.1	Upgarding of NSD,ARD,FAD,NRD																
	& TDD Chief Office																
1	Demolition of existing acoustic	178	sq.m														
	ceiling & frame support including																
	electrical lightings, pipes, wires,																
	boxes and disposal of waste																
2	Installation of tubular pipe frame																
	ceiling support																
	2" x 3" x 1.5mm thk x 20' Rectangular B.I	45	pcs														
	Welding rod	1	box														
	4"Ø cutting disc	10	pcs														
2.4	4"Ø grinding disc	5	pcs														
2.5	Asstd. Drill bit	10	pcs														<u> </u>
	Primer paint epoxy	2	gal														
2.7	Thinner epoxy	1	gal														
2.8	12"Ø cutting disc	1	рс														
2.9	Steel scaffoldings (Rental)	1	lot														1

3	Installation of New Gypsum board									
Ť	ceiling									
3.1	12mm thk Gypsum board ceiling w/	178	sq.m							
<u> </u>	1" x 2" metal furring frame @0.60m		04							
	O.C B.W with metal hanger support and									
	accessories									
3.2	1" x 4" x 12' S4S K.D Cornice	60	pcs							
3.3	Stikwel glue	5	kgs							
3.4	Tox w/ screw	1	lot							
3.5	Sand paper (assorted)	1	lot							
4	Painting of Ceiling									
	Surface preparation including sanding	178	sq.m							
4.2	Three (3) coats latex paint	178	sq.m							
4.3	Sanding, stain & varnishing of ceiling	160	LM							
	cornice									
5	Installation of ceiling insulation									
5.1	12mm thk Polyethelene foam insulation	115	sq.m							
	w/ aluminum foil on one side									
5.2	Rubber sealant	2	gal							
5.3	Ducting tape	1	lot							
6	Repainting of interior concrete walls									
	three (3) coats									
6.1	latex paint	320	sq.m							
7	Stain and Revarnishing of cabinets									
	(12 sets)									
7.1	Two (2) coats Polyurethane varnish	12	set							
	"Clear"									
7.2	Compressor and accessories (rental)	1	lot							
	Sub-total									
B.2	Upgrading of Deputy Director's									
	Office and Director's office									
1	Demolition of existing acoustic ceiling	132	sq.m							
	and frame support including electrical									
	lightings, pipes, wires, boxes and									
	disposal of waste									

2	Installation of Tubular pipe frame ceiling									
	support									
	2" x 3" x 1.5mm thk x 20' Rectangular B.I	40	pcs							
2.2	Welding rod	1	box							
2.3	4"Ø Cutting disc	6	pcs							
2.4	4"Ø Grinding disc	3	pcs							
2.5	Asstd. Drill bit	7	pcs							
2.6	Primer paint epoxy	2	gal							
2.7	Epoxy thinner	1	gal							
2.8	12"Ø Cutting disc	1	рс							
3	Installation of new gypsum board ceiling									
3.1	12mm thk Gypsum board ceiling with	132	sq.m							
	1" x 2" metal furring frame @0.60m									
	O.C B.W w/ metal hanger									
	support and accessories									
3.2	1" x 4" x 12' S4S K.D Cornice	38	pcs							
3.3	Stickwel glue	2	kg							
3.4	Tox w/ screw	1	lot							
3.5	Sand paper (Assorted)	1	lot							
4	Painting of ceiling									
4.1	Surface preparation including sanding	132	sq.m							
4.2	Three (3) coats latex paint	132	sq.m							
4.3	Sanding, stain & varnishing of ceiling	145	LM							
	cornice									
5	Installationg of ceiling insulation									
5.1	12mm thk Polyethelene foam insulation	150	sq.m							
	w/ aluminum foil on one side.									
5.2	Rubber sealant	1	gal							
5.3	Ducting tape	1	lot							
6	Repainting of interior concrete walls									
6.1	Three (3) coats latex paint	220	sq.m							
7	Revarnishing of cabinets									
7.1	Two (2) coats Polyurethane varnish	7	set							
	" Clear"									
	Sub-total									_

B 3	Upgrading Of NART bldg. Comfort											
D.0	room ceiling (Ground floor left side											
	and right side, Second floor left side											
	and right side, Third floor left side											
	and right side) Comfort room ceiling											
1	Demolition of existing acoustic ceiling	230	sq.m									
- '	and frame support including electrical	230	5 q .111									
	lightings, pipes, wires, boxes and											
	disposal of waste											
2	Installation of 2" x 4" metal stud frame											
	ceiling support	00										
-	2" x 4" x 1.00mm thk x 3.00m metal stud	89	pcs									
2.2	Tox w/ screw	400	pcs									
2.3	Aluminum blind rivets	6	box									
2.4	Asstd. Drill bit	24	pcs									
	Steel scaffoldings (rental)	1	lot									
3	Installation of ceiling insulation @ 3rd											
	floor C.R. left and right side											
3.1	12mm thk polyethelene foam insulation	76	sq.m									
	w/ aluminum foil on one side											
3.2	Rubber sealant	1	gal									
3.3	Ducting tape	1	lot									
4	Installation of new metal spandrel ceiling											
4.1	0.6mm thk x 0.10m width white metal	230	sq.m									
	pre-painted spandrel ceiling with											
	1" x 2" x 0.50mm thk metal furring											
	frame @ 0.40m O.C with metal hangers											
	and accessories											
4.2	Steel scaffoldings (rental)	1	lot									
5	Repainting of interior concrete walls											
	excluding ground floor comfort room											
	(Male and Female) @right side											
5.1	Three (3) coats latex paint	343	sq.m									
6	Repair of wooden door, door jamb w/											
	moulding, lavatory sink											
6.1	Repair of wooden door including stain	2	sets									
	and varnishing											
	and variioning			L	L		l		l		L	

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6.2	Repair of wooden jamb w/ moulding	1	set											
	including stain and varnishing													
6.3	Repair of lavatory sink marble tiles	1	lot											
6.4	"Yale" Door lockset (Stainless steel)	1	set											
7	Cleaning, Re-sanding and waxing of													
	existing floor and wall marble tiles													
	including cubicles of 2nd and 3rd floor													
	comfort room at right side (Male and													
	Female) including utility room													
7.1	Cleaning, Re-sanding and waxing of	320	sq.m											
	existing floor and wall marble tiles													
	Sub-total													
B.4	Upgrading Of Auditorium ceiling													
1	Removal and disposal of existing	1	lot											
	acoustic ceiling board to designated													
	area													
2	Repair, re-alignment of existing metal	1	lot											
	T-runner													
3	Re-painting of existing metal T-runner	1	lot											
	with at least two (2) coats of enamel													
	paint including wood ceiling													
4	Installation of new Armstrong acoustic													
	ceiling board													
	0.60m x 0.60m white acoustic board fine	900	pcs											
	fissured acoustic "Armstrong" brand													
	Sub-total													
B.5	REPAIR AND UPGRADING OF DEPUTY I	DIREC	TOR'S											
	PANTRY													
1	Removal of existing wall tiles, counter	1	lot											
	top plywood w/ laminated sht. and													
	door cabinets													
2	Chipping of concrete flooring for the	1	lot											
	installation of new PPR Waterline and													
	PVC Sewerline													
3	Upgrading of counter sink with cabinets													
			•											

- 1	2/4" × 4! × 0! Marina phayead	4								
	3/4" x 4' x 8' Marine plywood	1	рс							
3.2	1/2" x 1" x 10' S4S K.D	2	рс							
	Concealed hinges	4	рс							
	Stainless steel handle	14	рс							
3.5	Stainless steel sink w/ strainer (small)	1	set							
3.6	Stainless steel goose type faucet	1	set							
	(Pozzi medium)									
3.7	Stainless steel flexible hose	2	рс							
3.8	Stainless steel valve	2	рс							
3.9	Epoxy sealant	1	lit							
3. 10	Stainless steel P-trap	1	рс							
3.11	Solignum wood preservative	1	lit							
3.12	Stikwel glue	1	kg							
3.13	Asstd. Fin. Nail	1	kg							
3.14	(0.60m x 1.80m) 3/4" thk solid granite	1	рс							
	counter top									
3.15	Ready fix cement	1	gal							
3.16	ABC tile adhesive	3	bag							
3.17	Portland Cement	1	bag							
3.18	Thoroseal waterproofing	1	gal							
3.19	40 x 40 mosaic gloss tiles	14	рс							
3. 20	ABC tile grout	2	kg							
3.21	Flourescent fixture including wires, pipes	1	lot							
	and switch									
4	Installation of new waterline and									
	sewerline									
4.1	1/2"Ø x 15ft. PPR pipe	2	рс							
4.2	Asstd. 1/2"Ø PPR fittings	1	lot							
4.3	1/2"Ø PPR brass gate valve	1	рс							
4.4	2"Ø x 10' S-1000 PVC pipe	2	рс							
4.5	Asstd. 2"Ø PVC fittings	1	lot							
4.6	PVC cement	1/4	lit							
4.7	Miscellaneous	1	lot							
5	Repainting of shelves and cabinets									
5.1	Hanging cabinets (Interior and exterior)	1	set							
5.2	Counter sink cabinets (interior and	1	set							
	exterior)									

1	E 2	Concrete wells (Interior)	1	lot							
B.6 REPAIR OF COMFORT ROOM	5.3	Concrete walls (Interior)		lot							
B.6. REPAIR OF COMPORT ROOM	5.4		1	lot							
SEWERLINE, FIXTURES,		Sub-total									
SEWERLINE, FIXTURES,											
ACCESSORIES (GROUD FLOOR TO THIRD FLOOR LEFT SIDE AND RIGHT SIDE) AND WATERROOFING 1 Fixture Accessories 1.1 Water tank fittings complete set 6 set 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	B.6										
THIRD FLOOR LEFT SIDE AND											
RIGHT SIDE) AND WATER PROOFING		ACCESSORIES (GROUD FLOOR TO									
1.1 Fixture Accessories		THIRD FLOOR LEFT SIDE AND									
1.1 Water tank fittings complete set 6 set .		RIGHT SIDE) AND WATERPROOFING									
1.2 Water closet flexible hose "Stainless 6 pcs	1	Fixture Accessories									
State	1.1	Water tank fittings complete set	6	set							
1.3 Stainless steel faucet (Hose bibb) made 6 pcs in U.S.A in U.S.	1.2	Water closet flexible hose "Stainless	6	pcs							
in U.S.A 1.4 Stainless steel bidet made in U.S.A 3 pcs or equal 1.5 Double angle valve made in U.S.A 3 pcs or equal 1.6 Single angle valve made in U.S.A 3 pcs or equal 1.7 Lavatory flexible hose "Stainless steel" 3 pcs or equal 1.7 Lavatory flexible hose "Stainless steel" 3 pcs or equal 1.8 Urinal flush complete set made in U.S.A 2 pcs or equal 1.9 Miscellaneous (Consumables and 1 lot 1		steel"									
1.4 Stainless steel bidet made in U.S.A 3 pcs or equal 1.5 Double angle valve made in U.S.A 3 pcs 1.6 Single angle valve made in U.S.A 3 pcs 1.7 Double angle valve made in U.S.A 3 pcs 1.7 Double angle valve made in U.S.A 3 pcs 1.7 Double angle valve made in U.S.A 3 pcs 1.7 Double angle valve made in U.S.A 3 pcs 1.7 Double angle valve made in U.S.A 3 pcs 1.7 Double angle valve made in U.S.A 3 pcs 1.7 Double angle valve made in U.S.A 3 pcs 1.7 Double angle valve made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 3 pcs 1.8 Urinal flush complete set made in U.S.A 3 pcs 1.8 Urinal flush complete set made in U.S.A 3 pcs 1.8 Urinal flush complete set made in U.S.A 4 Urinal flush complete set made in U.S.A 3 pcs 1.8 Urinal flush complete set made in U.S.A 3 pcs 1.8 Urinal flush complete set made in U.S.A 3 pcs 1.8 Urinal flush complete set made in U.S.A 4 Urinal flush complete set made in U.S.A 5 pcs 1.8 Urinal flush complete set made in U.S.A 5 pcs 1.8 Urinal flush complete set made in U.S.A 5 pcs 1.8 Urinal flush complete set made in U.S.A 5 pcs 1.8 Urinal flush complete set made in U.S.A 5 pcs 1.8 Urinal flush complete set mad	1.3	Stainless steel faucet (Hose bibb) made	6	pcs							
or equal 1.5 Double angle valve made in U.S.A 3 pcs or equal 1.6 Single angle valve made in U.S.A 3 pcs or equal 1.7 Lavatory flexible hose "Stainless steel" 3 pcs or equal 1.8 Urinal flush complete set made in U.S.A 2 pcs or equal 1.9 Miscellaneous (Consumables and 1 lot fittings) 2 Application of rubber sealant on all existing sewerline joint fittings and cement waterproofing of concrete floor slab hole 2.1 Rubber sealant 5 gal 2.2 Thoroseal waterproofing cement 3 gal 2 Putly knife 2 Putly knife 2 Putly knife 2 Pos 3 pcs 4 Putl Stainless (Consumables and 4 Putl Stainless (Consumables and 5 gal 6 Sal 7 Putl Stainless (Consumables and 8 Putl Stainless (Consumables and 9 Pu		in U.S.A									
1.5 Double angle valve made in U.S.A 3 pcs or equal 1.6 Single angle valve made in U.S.A 3 pcs or equal 1.7 Lavatory flexible hose "Stainless steel" 3 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.9 Miscellaneous (Consumables and 1 lot 1.9 Miscellaneous (Consumables and 1 lot 1.9 Application of rubber sealant on all 1.9 existing sewerline joint fittings and 1.0 cement waterproofing of concrete floor 1.9 Islab hole 1.0 cement waterproofing cement	1.4	Stainless steel bidet made in U.S.A	3	pcs							
or equal 1.6 Single angle valve made in U.S.A or equal 1.7 Lavatory flexible hose "Stainless steel" 3 pcs or equal 1.8 Urinal flush complete set made in U.S.A or equal 1.9 Miscellaneous (Consumables and fittings) 2 Application of rubber sealant on all existing sewerline joint fittings and cement waterproofing of concrete floor slab hole 2.1 Rubber sealant 5 gal 2.2 Thoroseal waterproofing cement 3 gal 2.3 Putty knife 2 pcs 4 Miscellaneous (Additional hangers and 1 lot		or equal									
1.6 Single angle valve made in U.S.A 3 pcs or equal 1.7 Lavatory flexible hose "Stainless steel" 3 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs 1.9 Urinal flush complete set made in U.S.A	1.5	Double angle valve made in U.S.A	3	pcs							
or equal 1.7 Lavatory flexible hose "Stainless steel" 3 pcs 1.8 Urinal flush complete set made in U.S.A 2 pcs or equal 1.9 Miscellaneous (Consumables and 1 lot fittings) 2 Application of rubber sealant on all existing sewerline joint fittings and cement waterproofing of concrete floor slab hole 2.1 Rubber sealant 5 gal 2.2 Thoroseal waterproofing cement 3 gal 2.3 Putty knife 2 pcs 2.4 Miscellaneous (Additional hangers and 1 lot support)		or equal									
1.7 Lavatory flexible hose "Stainless steel" 3 pcs	1.6	Single angle valve made in U.S.A	3	pcs							
1.8 Urinal flush complete set made in U.S.A 2 pcs		or equal									
or equal 1.9 Miscellaneous (Consumables and 1 lot	1.7	Lavatory flexible hose "Stainless steel"	3	pcs							
1.9 Miscellaneous (Consumables and 1 lot <td< th=""><td>1.8</td><td>Urinal flush complete set made in U.S.A</td><td>2</td><td>pcs</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	1.8	Urinal flush complete set made in U.S.A	2	pcs							
fittings) 2 Application of rubber sealant on all existing sewerline joint fittings and cement waterproofing of concrete floor slab hole 2.1 Rubber sealant 5 gal 2.2 Thoroseal waterproofing cement 3 gal 2.3 Putty knife 2 pcs 4 Miscellaneous (Additional hangers and 1 lot support) 5 Intimize the sealant sealant seal to the sealant support)		or equal									
2 Application of rubber sealant on all	1.9	Miscellaneous (Consumables and	1	lot							
existing sewerline joint fittings and cement waterproofing of concrete floor slab hole 5 gal 5 gal 6 gal 7 gal 8 gal 7 gal 8 gal 8 gal 8 gal 8 gal 8 gal 9 g		fittings)									
cement waterproofing of concrete floor slab hole 2.1 Rubber sealant 5 gal 2.2 Thoroseal waterproofing cement 3 gal 2.3 Putty knife 2 pcs 2.4 Miscellaneous (Additional hangers and 1 lot support)	2	Application of rubber sealant on all									
slab hole 9		existing sewerline joint fittings and									
2.1 Rubber sealant 5 gal		cement waterproofing of concrete floor									
2.2 Thoroseal waterproofing cement 3 gal		slab hole									
2.3 Putty knife 2 pcs	2.1	Rubber sealant	5	gal							
2.4 Miscellaneous (Additional hangers and support) 1 lot	2.2	Thoroseal waterproofing cement	3	gal							
support)	2.3	Putty knife	2	pcs							
	2.4	Miscellaneous (Additional hangers and	1	lot							
Sub-total University of the Control		support)									
		Sub-total									

B.7	DE-CLOGGING OF URINAL AND									
	WATER CLOSET									
1	Removal, de-clogging and re-installation	2	sets							
	of urinal and cleaning									
2	Removal, de-clogging and re-installation	4	sets							
	of water closet and cleaning									
	Sub-total									
С	ELECTRICAL WORKS									
C.1	Supply and installation of 1 Panelboard: Panelboard PE, 150AT, 3P, 250V Main Circuit Breaker, Industrial Type and Branches Circuit Breakers, Bolt-on Type: 16 sets 30A, 2P, 250V, 1 set 30A, 3P, 250V, 6 sets 20A, 2P, 250V with ground terminal. (Middle Electrical Room, 2nd Floor)	1	lot							
•	Sub-total									
C2	Supply and installation of Panelboard E, 100AT, 3P, 250V Main Circuit Breaker, Industrial Type with 22 sets 20A, 2P, 250V Branches Circuit Breaker, Bolt-on Type with ground terminal (Middle Electrical Room, 2nd Floor)	1	lot							
	Sub-total									
C.3	Supply and installation of Panelboard PP3, 200AT, 3P, 250V Main Circuit Breaker, Industrial Type with 3 sets 40A, 2P, 250V, 19 sets 20A, 2P, 250V Branches Circuit Breaker, Bolt-on Type with ground terminal (Left Wing Electrical Room, 3rd Floor)	1	lot							
	Sub-total									
C.4	Supply and installation of Panelboard LP3, 100AT, 3P, 250V Main Circuit Breaker, Industrial Type with 22 sets 20A, 2P, 250V Branches Circuit Breaker, Bolt-on Type with ground terminal (Left Wing Electrical Room, 3rd Floor)	1	lot							
	Sub-total									

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C.5	Supply and installation of Panelboard PP2, 125AT, 3P, 250V Main Circuit Breaker, Industrial Type with 4 sets 30A, 2P, 250V, 16 sets 20A, 2P, 250V Branches Circuit Breaker, Bolt-on Type with ground terminal (Left Wing Electrical Room, 2nd Floor)	1	lot								
	Sub-total										
C.6	Supply and installation of Panelboard LP2, 70AT, 3P, 250V Main Circuit Breaker, Industrial Type with 18 sets 20A, 2P, 250V Branches Circuit Breaker, Bolt-on Type with ground terminal (Left Wing Electrical Room, 2nd Floor)	1	lot								
	Sub-total										
C.7	Supply and installation of lighting circuits for the Director, Deputy Director and other Chief Offices as indicated in the electrical plan.										
1	Fluorescent Light Fixtures, Recessed Type, Mirrorized with louver, LED, 1x40W, T8, 12"x48", Fluorescent Holder G13	65	sets								
2	Two Gang Switch with cover, WEG Panasonic Brand	8	sets								
3	One Gang Switch with cover, WEG Panasonic Brand	8	sets								
4	3.5 mm ² THHN/THWN wire, UL Listed	4	rolls								
5	4" Ø Octagonal box with cover	66	pcs.			 					
6	15 mmØ Rigid steel conduit (RSC), Nichi Brand	75	pcs.								
7	15 mmØ RSC locknut and bushing	145	set								
8	RSC hangers/supports with expansion bolt, threaded rod (10mmø, 1m long),1"x1" angle bar, & U-bolt/nut	71	sets								
	Sub-total										
C.8	Supply and installation of lighting circuits of Comfort Rooms for the Ground , Second and Third Floor as indicated in the electrical plan.										
1	15 mmØ Rigid steel conduit (RSC)	75	pcs.	_					-	 	

2	15 mmØ RSC locknut and bushing	234	sets							
	Pinlight, 6 Inches diameter with 12W	107	sets							
	LED Bulb	107	3013							
4	4" Ø Octagonal box with cover	111	pcs.							
-	Two Gang Switch with cover, WEG		pcs.							
5	Panasonic Brand	12	sets							
6	One Gang Switch with cover, WEG Panasonic Brand	3	sets							
7	3.5 mm ² THHN/THWN wire, UL Listed	5	rolls							
8	RSC hangers/supports with expansion bolt, threaded rod (10mmø, 1m long),1"x1" angle bar, & U-bolt/nut	72	sets							
9	Industrial Exhaustfan 12"Ø "Asahi brand"	12	sets							
10	Convinience outlet, single w/ ground	12	sets							
11	2" x 4" utility box	18	pcs.							
12	15mmØ Rsc pipe	12	pcs.							
13	Single pole switch (One gang)	6	pcs.							
	Sub-total Sub-total									
C.9	Repair of defective electrical RSC pipes inside the electrical room (2nd & 3rd floor, Left Wing), below the wire gutter. Work includes reconnection of the distribution circuits affected and pouring of concrete below the wire gutters.	1	lot							
	Sub-total									
C.10	Supply and installation of 60mm2 THHN and 30mm2 THHN cable from the existing new installed Panelboard located at the middle electrical room, 3rd floor to the main branch circuit breaker at the main distribution Panelboard MDP located at the middle electrical room, Ground floor NART BDLG.									
10.1	60mm2 THHN Cable	42	m							
10.2	30mm2 THHN Cable	14	m					 		
10.3	Pull wire	3	kgs							
	Sub-total									
	TOTAL									